

TITLE OF THE INVENTION

DNA ENCODING THE HUMAN SERINE PROTEASE T

ABSTRACT OF THE INVENTION

5 Here we describe the molecular identification of a cDNA encoding a novel serine protease we have termed protease T. The deduced amino acid sequence encodes a prepro form of 290 amino acids, and its alignment with other well-characterized serine proteases indicates that it is a member of the S1 serine protease family. We have found that the protease T mRNA is expressed in stomach, testis, 10 retina, fibroblasts, spinal cord, and several regions of the brain. Protease T mRNA is also found in leukocytes and in the Jurkat (ATCC TIB-152) T cell line. Thus, this protease is potentially involved in gastric, testicular, retinal, dermatological, neurological/neurodegenerative and/or immunological disorders. The protease T gene maps to human chromosome 16p13.3 which is near the tryptase locus. Enzymatically 15 active protease T, we have generated, is amenable to further biochemical analyses for the identification of physiological substrates and specific modulators.